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10/786,001

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EXAMINER

MUHAMMED, ABDUKADER S

ART UNIT

PAPER NUMBER

2627

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/786,001	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> Abdukader Muhammed	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 14-17, 26-36 and 50-71 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 14-17, 26-36 and 50-71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. The preliminary amendment filed on 08 March 2007 has been considered. Claims 10-13, 18-25, and 37-49 have been canceled. Claims 1-9, 14-17, 26-36, and 50-71 remain in the application.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 6-9, 14, 16, 26-28, 36, 50-53, 60-65, and 68-71 are rejected under 35 U.S.C. 102(e) as being anticipated by Park et al. (US Publication 2004/0090888 A1).
5. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Regarding Claims 1, 6-8, 26-27, and 60, Park et al. teach a recording medium for use with a recording and/or reproducing apparatus (see figure 2), the recording medium comprising:

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a record layer comprising a lead-in area, a data area, and a lead-out area (see figure 3); a plurality of defect management area in at least one of the lead-in area and/or the lead-out area (DMA1 to DMA4; see figure 3); and a plurality of temporary defect management area in at least one of the lead-in area and/or- the lead-out area and which includes temporary defect information and temporary defect management information used by the recording and/or reproducing apparatus in performing defect management (TDMA1 and TDMA2 with their TDDS and TDFL; see figure 3), wherein the temporary defect management information includes an address, physical sector number, of a last recorded unit of user data in the data area (TDFL includes defect list from #1 up to #n; see figure 3).

Regarding Claims 9, 36, 51-52, and 68-70, as applied to claims 1 and 26 above and Park et al. further teach that the recording medium having a spare area in which replacement data is to be recorded (inner spare area ISAO and outer spare area OSAO; see figure 3), and the temporary defect management information further includes an address of a last recorded unit of replacement data which was recorded in a spare area of the recording medium to replace a defective area of the recording medium (TDFL includes plurality of defect entries and corresponding replacement areas; see page 3, paragraph [0045], lines 6-9).

Regarding Claim 28, as applied to claim 27 above and Park et al. further teach that the data is recorded in corresponding recording units, and each recording unit has a corresponding pair of the temporary defect information and temporary defect management information for performing defect management with respect to at least the recording unit (TDFL and TDDS are updated as a pair in sequence; see TDMA1 in figures 3 and 5).

Regarding Claims 50 and 71, as applied to claims 1 and 26 above and Park et al. further teach that the recording medium is a write once disc (see title).

Regarding Claim 53, as applied to claim 1 above and Park et al. further teach that the last recorded temporary defect information and a last recorded temporary defect management information, which are lastly recorded in the temporary defect management area are recorded in the defect management area for finalization of the recording medium (TDMA is recorded to final DMA when the recording medium is to be finalized; see page 1, paragraph [0016]).

Regarding claims 14, 16, and 60-65, apparatus claims 14, 16, and 60-65 are drawn to the recording and/or reproducing apparatus of the corresponding recording medium shown above and contain similar limitations. Therefore apparatus claims 14, 16, and 60-65 are rejected over the same grounds.

6. Claims 1, 6-8, 26-27, 32, 35, 55-57, 60 and 66 are rejected under 35 U.S.C. 102(e) as being anticipated by Park et al. (US Publication 2004/0174793 A1).

7. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Regarding Claims 1, 6-8, 26-27, and 60, Park et al. teach a recording medium for use with a recording and/or reproducing apparatus (see figure 1), the recording medium comprising: a record layer comprising a lead-in area, a data area, and a lead-out area (LIA, user data area and LOA; see figure 3); a plurality of defect management area in at least one of the lead-in area and/or the lead-out area (DMA1 to DMA4; see figure 3); and a plurality of temporary defect management area in at least one of the lead-in area and/or- the lead-out area and which includes

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temporary defect information and temporary defect management information used by the recording and/or reproducing apparatus in performing defect management (TDMA1 and TDMA2 with their TDDS and TDFL; see figure 3), wherein the temporary defect management information includes an address, physical sector number, of a last recorded unit of user data in the data area (TDFL includes defect list from #1 up to #n; see figures 3 and 4).

Regarding claims 32 and 35, as applied to claim 26 above and Park et al. teach that the recording medium further comprises a test area in which the data is not to be recorded and in which the recording and/or reproducing apparatus performs a test on the recording medium and the temporary defect management information further includes information about the test area (TDDS includes a test area to perform a test of read and write operation; see page 5, paragraph [0062], lines 3-6).

Regarding claims 55-57, Park et al. teach a recording medium for use with a recording and/or reproducing apparatus (see figure 1), the recording medium comprising: a record layer comprising a lead-in area, a data area, and a lead-out area (LIA, user data area and LOA; see figure 3); a defect management area in at least one of the lead-in area and/or the lead-out area (DMA1 to DMA4; see figure 3); and a temporary defect management area in at least one of the lead-in area and/or the lead-out area and which includes temporary defect information and temporary defect management information including location information of a test area of the recording medium (TDMA1 and TDMA2 with their TDDS and TDFL; see figure 3) and the last updated data of TDMA is recorded to DMA for finalization (Upon completion of any recording stage using a write-once type optical disc, final values of the TDMA information must be transferred to, and recorded in, the DMA; see page 3, paragraph [0048], lines 3-7).

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Regarding claim 66, an apparatus claim 66 is drawn to the recording and/or reproducing apparatus of the corresponding recording medium claimed in claim 55 and contains similar limitations. Therefore apparatus claim 66 is rejected over the same grounds.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 54, 58, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. (US Publication 2004/0174793 A1) further in view of Ito et al. (US 5,404,357).

Regarding Claims 2, 54, and 58, Park et al. teach a recording medium for use with a recording and/or reproducing apparatus (see figure 1), the recording medium comprising: a first record layer comprising a lead-in area, a data area, and a first outer area (see figure 9); a second record layer comprising a second outer area, a data area, and a lead-out area (see figure 9);

a defect management area in at least one of the lead-in area, the first outer area, the second outer area, the lead out area, or combinations thereof (DMA1 to DMA4; see figure 3);

a temporary defect management area in at least one of the lead-in area, the first outer area, the second outer area, the lead out area, or combinations thereof, and which includes temporary defect information and temporary defect management information (TDMA1 and TDMA2 with their TDDS and TDFL; see figure 3), which includes at least one of an address of a last recorded unit of user data in the data area, location information of a test area of the recording

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medium, or combinations thereof, used by the recording and/or reproducing apparatus in performing defect management (TDFL includes defect list from #1 up to #n; see figures 3 and 4 and TDDS includes a test area to perform a test of read and write operation; see page 5, paragraph [0062], lines 3-6) and the last updated data of TDMA is recorded to DMA for finalization (Upon completion of any recording stage using a write-once type optical disc, final values of the TDMA information must be transferred to, and recorded in, the DMA; see page 3, paragraph [0048], lines 3-7). Park et al. differ from the claimed invention in that they do not specifically show the defect management area having write protection information of the recording medium.

Ito et al. on the other hand teach defect management area having write protection information of the recording medium (see column 15, lines 60-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used write protection method in the system of Park et al. since Ito et al. teach that by using write protection it is possible to prevent the generation of the serious error caused by the linear replacement (see column 16, lines 4-9).

Regarding claim 67, an apparatus claim 58 is drawn to the recording and/or reproducing apparatus of the corresponding recording medium claimed in claim 58 and contains similar limitations. Therefore apparatus claim 67 is rejected over the same grounds.

10. Claims 3-4, 14-15, 17, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. (US Publication 2004/0174793 A1) as applied to claims 1 and 26, above, further in view of Ito et al. (US 5,404,357).



Regarding claims 3-4 and 33, Park et al. teach the limitations of claims 1 and 26 as shown above, Park et al. differ from the claimed invention in that they do not specifically show the defect management area having write protection information of the recording medium.

Ito et al. on the other hand teach defect management area having write protection information of the recording medium (see column 15, lines 60-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used write protection method in the system of Park et al. since Ito et al. teach that by using write protection it is possible to prevent the generation of the serious error caused by the linear replacement (see column 16, lines 4-9).

Regarding claims 14-15, and 17, apparatus claims 14-15, and 17 are drawn to the recording and/or reproducing apparatus of the corresponding recording medium claimed above and contain similar limitations. Therefore apparatus claims 14-15, and 17, are rejected over the same grounds.

11. Claims 5, 29, 31, 34, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. (US Publication 2004/0174793 A1) as applied to claims 1 and 26, above, further in view of Fukushima et al. (US 6,552,982 B1).

Regarding claims 5, 29, 31, and 34, Park et al. teach the limitations of claims 1 and 26 as shown above, Park et al. differ from the claimed invention in that they do not specifically show the recording medium further comprising a drive & disc information area in at least one of the lead-in area and/or the lead-out area.

Fukushima et al. on the other hand teach a drive & disc information area in the lead-in area (see figure 2). It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to have used a drive & disc information area in the system of Park et al. since Fukushima et al. teach that by using a drive & disc information area it is possible to decrease wait time of the optical disk apparatus after loading (see column 1, lines 25-40).

Regarding claim 59, apparatus claim 59 is drawn to the recording and/or reproducing apparatus of the corresponding recording medium claimed above and contains similar limitations. Therefore an apparatus claim 59 is rejected over the same grounds.

12. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. (US Publication 2004/0174793 A1) in view of Fukushima et al. (US 6,552,982 B1) as applied to claim 29 above, further in view of Ito et al. (US 5,404,357).

Regarding claim 30, the combination of Park et al. and Fukushima et al. teach the limitations of claim 29 as indicated above. The combination of Park et al. and Fukushima et al. differs from the claimed invention in that they do not specifically show the defect management area having write protection information of the recording medium.

Ito et al. on the other hand teach defect management area having write protection information of the recording medium (see column 15, lines 60-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used write protection method in the system of Park et al. since Ito et al. teach that by using write protection it is possible to prevent the generation of the serious error caused by the linear replacement (see column 16, lines 4-9).

### ***Conclusion***

13. The prior art made of record in PTO-892 Form and not relied upon is considered pertinent to applicant's disclosure.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdukader Muhammed whose telephone number is (571) 270-1226. The examiner can normally be reached on Monday-Thursday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12 July 2007

  
THANG V. TRAN  
PRIMARY EXAMINER